Daniel L. Carlson Senior Engineering Geologist Central Valley Regional Water Quality Control Board 1685 E Street Fresno, California 93706

RE: Notice Tentative Waste Discharge Requirements and Public Hearing for Orange Avenue Disposal, Inc. for Post-Closure Maintenance and Corrective Action for Orange Avenue Landfill Fresno County

Mr. Carlson,

Included in this document are comments and recommendations by Orange Avenue Disposal, Inc. (OAD) for the tentative Waste Discharge Requirements (WDRs) and Monitoring and Reporting Program (MRP) numbers R5-2014-XXXX for Orange Avenue Landfill (OAL).

Comments on Tentative WDRs

1. Clarify distinction between implemented water Corrective Action Program (CAP) for remediation of exiting groundwater plume and water CAP for future foreseeable release for purposes of maintaining adequate financial assurance

From the tentative WDRs, Page 1, (3):

On 9 December 2011, the Discharger submitted an Engineering Feasibility and Corrective Action Program (EFS/CAP) for the landfill to establish a corrective action program (CAP). The EFS/CAP serves as an amendment to the report of waste discharge. The information in the EFS/CAP has been used in revising these waste discharge requirements (WDRs). The EFS/CAP contains the applicable information required in Title 27.

Page 7, (43):

Title 27, section 22221 requires a cost estimate for corrective action of all known or reasonably foreseeable releases. The Discharger submitted a 2013 cost estimate of \$579,973 for corrective action of all known or reasonably foreseeable releases. This Order requires that the Discharger maintain financial assurance with the CalRecycle in at least the amount of the cost estimate adjusted annually for inflation.

Referencing April 16, 2014 electronic correspondence from OAD to CalRecycle:

(The most recent Annual Inflation Factor 2012) erroneously referenced a 2011 study conducted by EBA Engineering (titled: Engineering Feasibility Study and Corrective Action Program) as the highest corrective action cost estimate (\$558,000). The 2011 EBA report is an Engineering Feasibility Study to address specific existing contamination to groundwater caused by the previous operation of the landfill, not possible future releases or emergency situations...

The proper corrective action cost estimate which should have been used is listed in a 2007 report by Vector Engineering (titled: Corrective Action Cost Estimate). This Vector amount (\$250,526) has been used as the financial assurance estimate for corrective action since before Orange Avenue's closure. In a September 8, 2010 letter from the CRWQCB, Dane Johnson references the Vector amount, after inflation adjustment, stating:

"The current cost estimate of \$266,105 for corrective action financial assurance appears adequate."

The WDRs should be clarified to note the 2011 EFS/CAP outlines the current, ongoing remediation of the existing groundwater plume while the 2007 CAP defines the actions to be taken in case of future release and the required financial assurance value.

2. Correct post-closure financial assurance requirement amount

From the tentative WDRs, Page 7, (42):

The amount of the cost estimate for post-closure maintenance in 2013 dollars is \$1.3 million.

Referencing April 16, 2014 electronic correspondence from OAD to CalRecycle:

The highest post-closure amount (\$1,114,200) yields a 2013 amount of \$1,183,552, not the previously reported \$1,314,221. The previously reported value was incorrectly computed.

The WDRs should be updated to reflect the correct post-closure financial assurance amount of \$1,183,552.

3. Include provision for reducing post-closure financial assurance funds in accordance with CCR Title 27 Section 22211

From the tentative WDRs, Page 7, (42):

This Order requires that the Discharger maintain financial assurance with CalRecycle in at least the mount of the post-closure maintenance cost estimate adjusted annually for inflation.

From CCR Title 27 Section 22211 (b)(2), referencing the multiplier (30) for calculating post-closure cost:

Upon request by the operator and verified by CalRecycle, at the end of each year of postclosure maintenance, the operator may reduce the multiplier on a one-for-one basis with the number years of postclosure maintenance complete, but shall not reduce the multiplier to less that fifteen (15).

OAL's post-closure cost estimate was finalized in November 2009 and meets the requirements for allowing annual post-closure cost estimate reduction. The tentative WDRs should be updated to reflect the ability of OAD to reduce post-closure funds annually.

1. Clarify unsaturated zone monitoring network probe usage

From the tentative MRP, Page 3, (2):

The current unsaturated zone monitoring network shall consist of:

Mon Pt.	<u>Status</u>
GW-1 GW-2 GW-3	Detection/Corrective Action, Soil-Pore Gas Detection/Corrective Action, Soil-Pore Gas Detection/Corrective Action, Soil-Pore Gas
GW-7	Detection/Corrective Action, Soil-Pore Gas

The MRP should include a note that only the middle probes of the listed GW wells are used for unsaturated zone monitoring.

2. Remove unnecessary requirements for surface water monitoring

From the tentative MRP, Page 11, (C)(1)(a):

Identify all distinct bodies of surface and ground water that could be affected in the event of a release from a waste management unit or portion of a unit.

From the tentative MRP, Page 11, (C)(1)(b):

Include a map showing the monitoring points and background monitoring points for the surface water monitoring program...

(Additional references to surface water monitoring not included.)

From CCR Title 27 Section 20415 (c)(1):

General-The discharger shall establish a surface water monitoring system to monitor each surface water body that could be affected by a release from the Unit.

No surface waters are located near to OAL. All provisions for surface water monitoring should be removed from the MRP.

3. Remove unnecessary requirements for monitoring leachate accumulation on liners and leachate collection and removal systems

From the tentative MRP, Page 9, (g):

An evaluation of the effectiveness of the leachate monitoring and control facilities, and of the run-off-run-on control facilities. Include a summary of any instances where leachate depth on an MSW landfill liner system exceeded 30 cm (excluding the leachate sump), and

information about the required notifications and corrective action in Standard Facility Specification E.13 of the SPRRs.

From the tentative MRP, Page 10, (g):

The results of the annual testing of leachate collection and removal systems required under Standard Facility Specification E.14 of the SPRRs.

OAL has no liner system or leachate collection and removal system. All requirements to monitor liners or leachate collection systems should be removed from the MRP.

4. Clarify due date for financial assurance

From the tentative MRP, Page 11, (7):

Financial Assurances Report: By 1 June of each year, the Discharger shall submit a copy of the annual financial assurances report due to CalRecycle that updates the financial assurances for closure, post-closure maintenance, and corrective action. Refer to Financial Assurances Specifications F.1 through F.3 of the WDRs.

The WDRs state the due date for financial assurance reporting is June 30. The MRP should be updated to agree with the WDRs.

5. Clarify a Table III reference to a "short list" in Table V.

Table V has no "short list." The reference in Table III should be changed to note the correct table.

6. Update monitoring program tables for consistency with the approved, ongoing 2011 $\ensuremath{\mathsf{EFS/CAP}}$

Table I should note: Only applies to CMT-1 (all saturated channels) and CMT-2 though CMT-4 (uppermost saturated channel).

Add "Table II: Groundwater Corrective Action Monitoring Program" with the note: Applies to CMT-2 through CMT-4 (al channels below uppermost saturated channel) and CMT-5 through CMT-7 (all saturated channels). Table II will contain identical information to Table I, with the following Monitoring Parameters removed: chloride, carbonate, bicarbonate, calcium, magnesium, potassium. Subsequent tables should be renumbered accordingly.

If you have any questions concerning the comments and recommendations listed above, please contact myself at johnj@cartsinc.net.

Thank you

John Jowers

OAD Staff Engineer